

REMARKS/ARGUMENTS

Claims 1-29 are currently pending. Claims 3, 19, and 20 stand rejected under 35 U.S.C. § 112¶1. Claims 1-6, 10-16, 21-24, and 28-29 stand rejected under 35 U.S.C. § 102(b). Claims 7-9 and 25-27 stand rejected under 35 U.S.C. § 103(a). The Examiner has objected to claims 17 and 18 without stating a reason for the objection.

Claim 1 has been amended to add the following language: “adding a complexant to the pulp prior to or during step (b) to minimize iron hydroxide reforming a film on the iron-containing sulphides.” Support for this language is found at least on page 4, lines 4 through 8, and page 15, lines 29 through 31. Claim 3 has been cancelled. Claim 15 has been amended to change the “Y” subscript from an upper case letter to lower case letter. Claim 17 has been amended so that it depends from Claim 1 instead of Claim 3 which has been cancelled, and to use the more common form of the language used to specify Markush groups. Claims 19 and 20 have been amended so that each claim depends from Claim 1 instead of Claim 3 which has been cancelled.

Claims 37 and 38 are new independent claims. Support for these new independent claims is found at least on page 3, line 1 through page 4, line 2; page 5, line 30 through 31; and page 15, lines 22 through 31.

The Examiner rejected Claims 3, 19, and 20 under 35 U.S.C. § 112 ¶ 1 because the specification “does not reasonably provide enablement for the broad term ‘complexant’ absent a more detailed explanation of how one may determine the nature of a ‘complexant’ without performing undue experimentation.” (Office Action (“OA”) at 2.) The Examiner, however, acknowledges that the “complexant” is described on the basis of its functionality and that the specification provides at least two enabling examples of “complexants,” namely citric acid and

oxalic acid. (*Id.*) Applicants respectfully disagree with the Examiner's assertion that the term "complexant" is too broad that it would require undue experimentation to determine the nature of the "complexant."

As the Examiner noted, the specification provides at least two enabling examples of "complexants," namely citric acid and oxalic acid. (Application at page 5, lines 30-31.) Moreover, the specification states that "citric acid acts as a complexing agent binding the iron ions which are solubilised in the lower potential and pH environment." (*Id.* at page 17, lines 16-18.) Given the two examples of a "complexant" and the purpose for using the "complexant" (*i.e.* the functionality), a person of ordinary skill in the art would be able to identify additional compounds that could be used as "complexants" without undue experimentation. Therefore, Applicants respectfully request that the Examiner withdraw the 112 ¶ 1 rejection.

The Examiner rejected Claims 1-6, 10-16, and 28-29 under 35 U.S.C. § 102(b) as being anticipated by Senior (U.S. Patent No. 6,170,669). (OA at 3.) Claim 1 has been amended to require adding a complexant. Senior does not teach a continuous flotation process for iron-containing sulphides in ores or concentrates of ores that requires adding a complexant. Indeed, the Applicants (which include Mr. Senior) discovered that adding a complexant enhanced the recovery benefit over the process disclosed in Senior. (Application at page 17, lines 11-14.) Specifically, Figure 4 shows the results of grade/recovery response for Slimes Column Tail with citric acid (Applicants' process denoted as CSIRO+citric) and without citric acid (Senior process denoted as CSIRO). It is clear from Figure 4 that adding a complexant like citric acid significantly enhances the recovery benefit. Therefore, Applicants respectfully request that the Examiner withdraw the 102(b) rejection.

The Examiner rejected Claims 7-9 and 25-27 under 35 U.S.C. § 103(a) as being obvious over Senior in view of Weston (U.S. Patent No. 3,735,931) because Weston teaches the use of multiple tanks to condition a sulfide ore with an acid prior to flotation. (OA at 3-4.) Claims 7-9 and 25-27 all depend from Claim 1 which has been amended to require adding a complexant. As stated above, Senior does not teach a continuous flotation process for iron-containing sulphides in ores or concentrates of ores that requires adding a complexant. Like Senior, Weston does not teach a continuous flotation process for iron-containing sulphides in ores or concentrates of ores that requires adding a complexant. The combination of Senior and Weston fails to teach every limitation of Claims 7-9 and 25-27. Therefore, Applicants respectfully request that the Examiner withdraw the 103(a) rejection.

Claim 37 is distinguishable from Senior and Weston at least because neither Senior nor Weston teaches controlling the addition of the reducing agent in step (b) by reference to the change in pulp potential as the reducing agent is being added. In addition, Weston fails to teach other elements of Claim 37. Therefore, Claim 37 is patentable over Senior and Weston because these references, either alone or in combination, fail to teach every element of Claim 37.

Claim 38 is distinguishable from Senior and Weston at least because neither Senior nor Weston teaches a continuous flotation process for iron-containing sulphides in ores or concentrates of ores that requires adding a complexant. In addition, Weston fails to teach other elements of Claim 38. Therefore, Claim 38 is patentable over Senior and Weston because these references, either alone or in combination, fail to teach every element of Claim 38.

For the foregoing reasons, claims 1-29 and 37-38 are patentable. Applicants respectfully requests that a Notice of Allowance be issued in this case.

The Commissioner is authorized to charge Deposit Account No. 50-1965 with any fees that maybe due in connection with this response.

Respectfully submitted,

Date: December 3, 2009

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